



# North Carolina Families Accessing Services through Technology Level Two Evaluation Results For

# **Selected Case Management / Customer Relationship Management Products**

Prepared by: Suzanne Marshall

NC FAST Business Liaison

**Department:** DHHS **Division:** DIRM

Submitted to: Lanier Cansler

NC FAST Executive Advisory Committee

**Department:** DHHS

**Division:** Deputy Director

**Date:** April 30, 2004

**Document Name:** CRM Level Two Evaluation Report

cc: Executive Advisory Committee Attendees

NC FAST Evaluation Team

# **Table of Contents**

1. Introduction	3
2. Level Two Results Summary	3
3. Level Two Review Process	4
4. Review Team	5
5. Level Two Results	5
5.1 Mecklenburg County Integrated Social Services Information (ISSI) system	em6
5.2 State of Maine ACES system	9
5.3 State of Minnesota Child Welfare system - Social Services Information System (SSIS)	12
5.4 State of Wisconsin Child Welfare system - eWiSACWIS	14
6. Attachments	17
Attachment One – Level Two Business Function Evaluation Matrix	18
Attachment Two – Level Two Technical Evaluation Matrix	23

# 1. Introduction

The North Carolina Families Accessing Services through Technology (NC FAST) project includes a review of existing software that may meet the functional requirements of the Case Management or Customer Relationship Management (CRM) system which is part of the NC FAST project. This document presents the results of the detailed Level Two reviews conducted for case management and eligibility applications. The applications reviewed were selected as a result of earlier, high-level Level One evaluations. The complete Level Two evaluation reports for each system are contained in the NC FAST project files in separate documents. The review process utilized by the evaluation team is described in this document.

# 2. Level Two Results Summary

Based on the results of the Level One review and direction from the Project Sponsor, the following systems were recommended for consideration for Level Two evaluations. Only systems in the public domain were considered for Level Two review. The table below summarizes the findings of the Level Two reviews:

System Name	Bus Score	Tech Score	% of Business Req. Met	% of Code Impacted to meet STA	Comments
State of Maine – ACES	715	395	79%	0%	
State of Wisconsin Child Welfare - eWiSACWIS	703	399	88%	20%	
State of Minnesota Child Welfare – SSIS	612	219	81%	100%	Delphi skills are rare.  Needs to be upgraded to be webbased and STA compliant.
Mecklenburg County – ISSI	431	252	51%	100%	Needs to be upgraded to be web- based and STA compliant.

Since each system has different program areas it serves, it is not possible to simply compare the business scores to determine the best solution. Additionally, no one system was found that will provide the needed functionality for all programs covered by NC FAST. It is expected that the final NC FAST automation solution will contain a combination of multiple systems. Additionally, if the actual code is not transferred for use in NC FAST, the design or flow of a particular worker job function could be analyzed and replicated for NC FAST. Since requirements definition and system design are a large part of the system development effort, this would help to expedite the implementation of an NC FAST system.

### NOTES:

Higher Business scores indicate a closer match to business requirements. Highest possible score is 842, based on weighted averages, with higher weighting of intake assessment and case management functions.

Higher Technical scores indicate a closer match to statewide technical architecture standards (STA) and desired system attributes. Highest possible score is 570 based on weighted averages.

% of Business Requirements Met indicates the effort required to modify the system to meet business requirements.

% of Code Rewrite to meet STA indicates the effort required to bring the system in line with STA.

# 3. Level Two Review Process

The review process was developed to provide the review team a guideline to follow in evaluating the functionality of systems in a concise and consistent manner. A high level evaluation of 19 identified systems was conducted during the Level One review. Four public domain systems were selected for a more detailed review based on the results of the Level One review.

The steps involved in Level Two review are listed below.

- **Step 1:** A detailed Level Two evaluation was conducted on systems selected from Level One review.
  - a. Additional detailed business requirements were added to the functional evaluation matrix (refer to attached *Level Two Business Function Evaluation Matrix*).
  - b. Additional detailed technical criteria were used to evaluate how well the system meets the NC FAST and statewide technical architecture and to estimate the effort required to transfer / customize the system to meet our business requirements. Refer to attached Level Two Technical Function Evaluation Matrix.
  - c. System demonstrations were scheduled as needed to complete detailed reviews of each system.
  - d. Technical code reviews of each system were conducted. At this level, the technical review focused on the amount of effort and cost required to implement the system to meet the statewide and departmental technical standards.
  - e. Each detailed system review was documented by both business and technical reviewers.
  - f. Each system was scored on both a detailed matrix for business and technical functionality.
  - g. Scores were totaled and an average weighted business and technical score computed for each system.
- Step 2: The evaluation reviews were summarized and written in this report.
- **Step 3**: The NC FAST EAC will make a final decision on which software to pursue based on the evaluation results.

# 4. Review Team

The review team consisted of both subject matter experts and technical staff members. The program areas represented on the team were Adult Services, including Special Assistance for Adults, Child Welfare Services, Food Assistance and Energy Programs, Work First (NC's TANF Program), Medical Assistance and Child Care Services. Members were included as appropriate for the system under review. DIRM Web Development Team representatives participated in the review process to obtain information on the technology being utilized by each system. Representatives from several counties attended presentations and demonstrations as well, especially during the Child Welfare system reviews. Members of the NC FAST Team also participated in the evaluation and the question and answer periods. Detailed observations, impressions, and results of the evaluation forms completed during each review are included in separate documents.

# 5. Level Two Results

The attached *Level Two Business Function Evaluation Matrix* and *Level Two Technical Evaluation Matrix* document the systems that were reviewed. The detailed business and technical evaluations for each system are recorded in separate documents and are on file.

Each system review contains the following areas:

- Overview a high level overview of the system, its functionality, and its ability to meet our business requirements
- **Score** the total score received on the business matrix, and an indication of the percent of business functions met by the system in its current state.
- Subject Areas the subject areas addressed by the system.
- **Technical** description of the technical environment and architecture of the system, an indication of the degree to which the code would need to be rewritten to meet the statewide and departmental technical architecture standards.

Systems under consideration for Level Two review were:

- Mecklenburg County ISSI
- State of Maine ACES
- State of Minnesota SSIS
- State of Wisconsin eWiSACWIS

Following are the evaluation summaries of each system considered for Level Two evaluation.

# <u>5.1 Mecklenburg County Integrated Social Services Information (ISSI)</u> <u>system</u>

#### Overview

The *ISSI* system was developed to serve the needs of the Mecklenburg County Department of Social Services. *ISSI* was developed using the latest technology available at the time it was designed. The system is still in User Acceptance Testing for the majority of the user base, so its capacity for a fully functional case management system has not been proven. It has been used by Fraud Investigations for approximately one year, and is currently being integrated into Adult Services.

The NC FAST Project Team completed a business process and technical review of the *ISSI* Case Management System, developed by the Mecklenburg County Department of Social Services. The *ISSI* system was demonstrated for a group of DHHS Division Directors and the Deputy Secretary on November 14, 2003; a technical review team visited Mecklenburg County on December 4, 2003; and a team of business subject matter experts visited Mecklenburg County on December 16, 2003 to review the *ISSI* system.

Overall, the system is easy to use, and the screens use many of the standard user-friendly elements such as drop down boxes, radio buttons, and check boxes with point-and-click capabilities. The screen layout and organization are intuitive for the social workers. However, the system does not enforce data consistency. Edit rules are not as complete as the State would require. The Mecklenburg county staff has given positive feedback about the system.

The search capabilities operate well and allow searches with multiple parameters, such as: client search by name, case number, address, status and various other fields.

Confidential case information appears to be secure from outside access; however, information is allowed to be overwritten with no protection of the original data or warning that the data is going to be overwritten.

Reviewers did not have the opportunity to see the security control of the system. However, the state of North Carolina would not adopt a county security structure for statewide implementation of the tool unless it is in compliance with statewide security requirements as established by DHHS or the Office of Information Technology Services (ITS).

The worker/supervisor management functions for caseload management allow easy movement of cases and workload distribution.

The *ISSI* system's Computer-based training (CBT) is very impressive; however, it is not interactive. The CBT will not allow data to be entered, and only allows the trainee to answer questions and follow the pre-programmed functions. The auditory as well as the written aspect of the training adds to the advantages of this tool.

#### Score

The total weighted score from the *ISSI* business evaluation is **431** (out of possible 842).

The total weighted score from the *ISSI* technical evaluation is **252** (out of possible 570).

# Subject Areas

# Adult Services and Special Assistance

The structure of the *ISSI* system follows the organizational structure of the agency rather than following programs, services or mandates. Other DSS groups in the state may not have the same organizational structure or have services grouped in the same way, and may not be able to use the same categories. Additionally, some of the business requirements are out of compliance with law and policy (based on a review of the *Adult Social Work Services Business Requirements Document* dated 5/19/2000).

# **Child Care Subsidy**

No comments were received from Child Care representatives.

### Child Welfare (CWII)

The Child Welfare II system (CWII) captures all information to track Child Welfare services and meet reporting requirements. The system allows for entry of basic health information such as immunizations and medical examinations. There is access to the county's ARMC (Automated Revenue Maximization System) to assist workers in completing Daysheets, charging to the most appropriate funding source to maximize federal and state funds. However, the CWII system is not currently integrated with *ISSI* or the Master Client Index. Child Protective Services intake is not included. There are no service plans, robust case load/task assignments, or eligibility determination functions. There are no automatic alerts, notifications or other common case management tools. There is no calendaring or appointment tracking. Worker contacts and notes are kept via a text file at the worker's discretion.

## Food Assistance and Energy Programs

The system has no eligibility rules incorporated into the application process, nor access to the eligibility rules on the State mainframe. The system requires a significant amount of manual processing; it does not compute monthly income or insert calculated amounts, and requires the user to enter amounts manually into both the *ISSI* system, and the transactional system.

### Medical Assistance Programs

The system has a folder structure that allows a user to open a folder and see the status of all programs. There is a feature that creates couples for Medicaid purposes. Automatic alerts notify the user when changes are made in any program area. The system maintains a history of all names, address, income, etc. The information in the drop-down boxes, help menus, and links needs improvement. The calculation of income needs to be incorporated into the application. The child support screen showing two different incomes is unacceptable. The system provides no automatic calculation of earned or fluctuating unearned income, and allows income information to be overlaid when making a change without issuing a warning.

# Work First

The automated application is very long and cumbersome. Most counties would not want to complete the entire process on every application. Some manual processes are required that should be automated.

#### Technical

### **Technical Architecture**

*ISSI* was designed and developed as a client-server application in Visual Basic 6 and is therefore not web-based. Due to the complexities and cost of maintaining and supporting client-server and distributed applications, the NC FAST project has determined that a centralized, web-based solution is required. Therefore, 100% of the existing code must be rewritten on a web-based platform. However, the migration of the code to a new platform is greatly simplified because of the apparent patterns in the original system.

The ISSI application is implemented with the following products:

Technology	Product
Database	SQL Server 2000
Application Server	Microsoft Com+
Reports	N/A
WebServer + Servlet Engine	N/A
Object Relational Mapper	N/A
Database Connectivity	Active X Data Objects
Productivity Tools	Visual Studio
Security	Custom using CyberVault II

### Security

The *ISSI* system uses CyberVault II, a custom enterprise identity management system developed by Mecklenburg County. The system is role based and provides further granularity through individual permissions. This should provide easy transition to a statewide security system, if required.

# **Technical Summary**

The *ISSI* system is built with technologies that are several years old, and the application platforms do not facilitate open communication and a rich client interface. The system architecture is based on meeting the needs of Mecklenburg County, and expanding the system to a statewide scope would have a major effect on the enterprise architecture. The current architecture would need to be upgraded to meet the requirements of the state architectural standards and the expanded scope, or a new architecture would need to be developed using current, standard technologies.

#### Note:

The *ISSI* system is owned by Mecklenburg County. The software is available free of charge. However, Mecklenburg County has stipulated that it must provide the vendor to make system modifications. If *ISSI* were selected for implementation these constraints would have to be addressed with the county in order for the project to be in compliance with the State's procurement process.

# 5.2 State of Maine ACES system

### Overview

The ACES System is a web-based system that has been developed as an eligibility and case management system for the state of Maine Department of Human Services/Assistance division. It went into production statewide in September 2002.

On February 12-13, 2004, a team of subject matter experts from each eligibility program area conducted a review of the Automated Client Eligibility System (ACES) at the invitation of the Maine Department of Human Services. A full technical review of the ACES system was conducted using code provided by the State of Maine.

Overall, the system is very user friendly, containing drop-down boxes with no codes for the user to remember. It collects and maintains a large amount of personal information regarding an individual, distributing data elements to the appropriate program areas.

The system contains a comprehensive on-line application for assistance programs, beginning with shared elements and branching out into program-specific areas, including Medicaid deductible calculations and long-term care budgeting, with spousal protection for income and assets.

The system contains a cascading hierarchy for evaluating level of assistance from highest to lowest available to an individual, or group of individuals, based on relationships entered into the system for individuals who are living together. Forms and letters are available for user selection as appropriate, and client notices are automatically generated when changes are made to a client record.

Claims and Quality Control management functions are included as well as caseload management. The caseload assignments follow Maine business practices, but could be easily modified to meet our needs.

The system produces quarterly and annual Federal reports.

#### Score

The total weighted score from the *ACES* business evaluation is **715** (out of possible 842).

The total weighted score from the *ACES* technical evaluation is **395** (out of possible 570).

### Subject Areas

## Adult Services and Special Assistance

The ACES system is fully compliant with the Americans with Disabilities Act (ADA), and includes fraud claims and Quality Control functions.

### Child Care Subsidy

The only child care managed through the *ACES* system is their TANF child care, through the first month of Transitional child care. *ACES* serves approximately 5,000 children per month, which closely matches the number of children served in Wake County. The remaining child care subsidy system in Maine is managed through their Resource Development Corporations, private, non-profit agencies. These agencies have their own systems that interface with the state reimbursement system to pay for the Child Care and Development Fund (CCDF) and other funded child care. *ACES* would meet the goals of decreasing the application processing time, decreasing the number of paper forms, decreasing program and process errors, and providing accurate information.

#### Child Welfare

No review was conducted for Child Welfare. ACES is an eligibility system only.

### Food Assistance and Energy Programs and Work First

The system accurately calculates monthly income based on information entered for each individual. The earned income screen allows for entry of individual check stubs and asks if that stub is representative of income and should be included in the calculation of eligibility and benefit level. The system uses the file produced by Social Security to do the annual Cost of Living Adjustment (COLA) update and send out the appropriate notices to clients; no code changes are required to the system to accomplish the mass change in eligibility and benefits for Social Security income changes. Mass changes are easy to handle since the system is table-driven for benefit levels and other elements that change often. Historical tables are maintained for claims calculations. Alerts are sent to users for cases that may have a claim condition based on information changed in the system at review or change.

## Medical Assistance Programs

The system allows any worker with security access to make changes to client information, but does not send an alert to other workers that a change has been made by another worker. Medical bills to be considered for inclusion in a deductible calculation must be entered in the correct date order. Once the deductible is met, no changes can be made even if earlier bills are presented or the worker made a keying error. This may be corrected in a future release.

### Technical

# **Technical Architecture**

The Maine *ACES* application was designed and developed as a thin client webbased application using the principles of the J2EE programming model. The application is developed as N-Tier application and logically defined into four layers.

Layer 1: Client Layer: Client Presentation Logic

Layer 2: Web Server: Server Side Presentation Logic

Layer 3: Application (Business and Common Services)

Layer 4: Data Storage

The ACES application architecture complies with the statewide technical architecture. Final review by State Enterprise Technology Strategies group is required to confirm this.

ACES was developed to run on Internet Explorer and may require modification to support the Netscape browser.

The ACES application was implemented using the following products:

Technology	Product
Database	Oracle
Application Server	Weblogic
Reports	Oracle Report Server
WebServer + Servlet Engine	Apache + Tomcat
Object Relational Mapper	Cocobase
Database Connectivity	Oracle JDBC Drivers
Productivity Tools	N/A
Security	Custom Security

At the time the *ACES* product was developed, the capabilities of J2EE technologies were immature with fewer features than the current J2EE technology standards.

### Security

The ACES application has implemented security levels based on user roles. This should provide easy transition to a statewide security system, if required.

## **Technical Summary**

The Maine *ACES* application complies with the statewide technical architecture and can be implemented in North Carolina on the Weblogic and Oracle platform.

# <u>5.3 State of Minnesota Child Welfare system - Social Services Information</u> <u>System (SSIS)</u>

#### Overview

The SSIS system is a Child Welfare case management system, also used by the Adult Services and Children's Mental Health staff in Minnesota. The review team attended a demonstration of the system on April 7 - 9, 2004.

SSIS is a client-server system (not web-based) developed by the State of Minnesota for SACWIS (Statewide Child Welfare Information System) certification by the Administration for Children and Families (ACF). Minnesota is a county-administered, state-supervised social services system, much like North Carolina. There are 87 counties in Minnesota, each containing Child Welfare services. SSIS went into statewide production in August of 1999.

The system contains a significant amount of case management functionality, such as assessment for traditional and alternative response child protective services, caseload management, and report production capability.

The system is user-friendly, containing drop-down boxes for all codes. Forms and letters are provided, but counties may also develop their own templates for documents. Federal reports are produced including: the AFCARS (Adoption and Foster Care Analysis and Reporting) and NCANDS (National Child Abuse and Neglect Data System). The Minnesota county staff has given positive feedback about the system. The screens are relatively easy to use, with smooth navigation between functions.

The system allows supervisors to move caseload assignments to adjust workloads and to cover vacancies. The system also provides the capability to create caseload reports to help manage the workload. Additionally, the system has a guided process (best practices) for workers to follow when setting up cases and delivering services.

The intake structure models the requirements for the Multiple Response System (MRS) as they have had an alternate response system for a few years now.

The process flow of the system appears to be logical, allowing the worker to access all the information needed by both their county and other counties within the state.

Each county database is stored locally at the county which requires a manual "clearing" process to synchronize the county and state databases and to positively identify individuals across county lines.

#### Score

The total weighted score from the *SSIS* business evaluation is **612** (out of possible 842).

The total weighted score from the *SSIS* technical evaluation is **219** (out of possible 570).

## Technical

### **Technical Architecture**

Minnesota's SSIS application was designed and developed as a client-server application and is therefore not web-based. The database is localized at the county level and synchronized with the state database through a Statewide Client Index (SWNDX).

Due to the complexities and cost of maintaining and supporting client-server and distributed applications, the NC FAST project has determined that a centralized, web-based solution is required.

The SSIS application	was implemented	l usina the foll	owina products.

Technology	Product
Database	Oracle
Application Server	Delphi Runtime
Reports	Digital Metaphor Report Builder
WebServer + Servlet Engine	N/A
Object Relational Mapper	Delphi
Database Connectivity	DBExpress
Productivity Tools	Delphi Third Party Components
Security	Custom Security

The SSIS application was developed using Delphi 7 Studio Enterprise, a case tool from Borland Corporation. One of the advantages of Delphi is that it enhances the developer productivity in developing the application and provides the standard framework to segregate the business logic from the data access logic. At the same time, the disadvantage is that the application is tied to the Delphi product which is not in congruence with the current statewide architectural standards. The SSIS must be migrated to a web-based platform. It is important to note that resources with Delphi skills are not readily available and are therefore expensive.

The SSIS application was implemented on a localized county level database, so it mandates that every county obtain an Oracle Database Server and Application Server. The advantage of localized application is that it can be easily customized according to the county requirements and provides the flexibility for the County

programmers to develop the reports required for County administration. At the same time, a complex process is required to synchronize the data and to share the data across the counties.

# Security

SSIS application has implemented the security levels based on user roles. This should provide easy transition to a statewide security system, if required.

## Technical Summary

Due to the NC FAST requirement to implement a web-based, centralized solution, the *SSIS* will need to be migrated to a web-based platform. Additionally, it will need to be structured to comply with the statewide technical architecture and the data model revised to handle a centralized database. This would require 100% modification to the existing code. Additionally, we can utilize a platform with a more common skill set which is more commonly used in the information technology industry. However, Delphi may have tools to convert the system to a web-based system, if the decision were made to remain with the Delphi technology. In this case, the architecture would still need to be revised to meet the architecture requirements and to provide a centralized solution.

# 5.4 State of Wisconsin Child Welfare system - eWiSACWIS

#### Overview

The *eWiSACWIS* system is a Child Welfare, Adoption and Foster Care case management system which was developed during 1999-2001, piloted in Milwaukee county beginning in September 2001 and scheduled to be in full production in June 2004, through a phased rollout to all counties. The review team consisting of representatives from all affected program areas traveled to Wisconsin on April 14-16, 2004 to review the business functionality of the system. The Child Care Services and Special Assistance for Adults experts were not included in this review because these program areas are not addressed in the system.

The eWiSACWIS system is a web-based child welfare case management system based on the New Mexico SACWIS system. The system began implementation through a phased implementation in Milwaukee, the largest county in Wisconsin, in September 2001. The rest of the state has been involved in phased rollout, to be complete in June 2004. The application, originally developed as a client-server application, was converted to web-based system, and released to counties in its new format in December 2003. The application supports the case management and monitoring of child welfare services including initial assessment, family reunification and support services, foster care and adoption assistance, case plan development, and permanency planning while interfacing with other State and County systems. The system enables workers to track clients from one county to the next, providing statewide eligibility information.

The system is very user-friendly, containing drop down boxes for all codes. A secure messaging system for statewide and county-specific messages is built in and allows users see the messages when they log onto the application. A spell

check is built in for narratives. Entries can be selected by date range, compressed dates or full history.

The system contains a powerful financial management function tool, with an interface to county financial systems which allows appropriate funding streams can be used and payments made to vendors.

The system collects and maintains a large amount of personal information regarding an individual, distributing data elements as the individual moves from case to case or service area to service area.

Forms and letters for are available for user selection as appropriate. The AFCARS and NCANDS federal reports are produced, with required elements of the AFCARS report noted on the screens.

The system allows supervisors to move caseload assignments as necessary to balance workloads or cover vacancies, as primary and/or secondary assignments. Assignments of many workers to a case are permitted, depending on the case status and staff requirements.

Automatic referrals to Child Support are made to capture payments for offsetting the cost of care for IV-E eligible children.

### Score

The total weighted score from the *eWiSACWIS* business evaluation is **703** (out of possible 842).

The total weighted score from the *eWiSACWIS* technical evaluation is **399** (out of possible 570).

### Technical

### **Technical Architecture**

The Wisconsin *eWiSACWIS* is a web-based system and has been successfully deployed statewide and is used by over 3000 caseworkers.

The application is built with the Apache Struts web framework and has a solid separation of the presentation markup, business logic, and data access layers. Although cleanly separated, the technology does not allow for the separation of the application layer and the web layer onto separated physical machines.

The application follows basic Java standards and uses portable libraries for all extensions. This allows deployment on any of the leading Java application servers.

The application makes only minimal use of database stored procedures. This is important because stored procedure code is typically specific to a vendor. Most of the data access logic is contained within the application and is not specific to a certain database vendor. This allows for deployment on any of the leading database products.

The application is implemented on the following products.

Technology	Product
Database	Oracle Database Server 8i
Application Server	IBM WebSphere Application Server 4
Reports	Crystal Reports (also custom)
WebServer + Servlet Engine	Websphere & Apache Struts
Object Relational Mapper	N/A
Database Connectivity	JDBC
Productivity Tools	N/A
Security	Novell iChain + Database

The application is written using J2EE standards and the Apache Struts web framework. The code is portable to any major vendor application server. The state has an existing licensed infrastructure in IBM WebSphere.

eWiSACWIS was developed to run on Internet Explorer and may require modification to support the Netscape browser.

## Security

The Novell iChain product is only used for basic authentication of users. Authorization information is stored within the application tables. There is a separate application for managing the users, roles, and permissions within *eWiSACWIS*. This should provide easy transition to a statewide security system, if required.

### **Technical Conclusion**

The application does not comply with the statewide technical architecture. However, conversion into a layered application does not appear to require significant effort. The system is very strong in other technical areas. The modular design of the application would allow rearrangement of the modules to create the physical separation of the application and web layers needed to comply with the architecture standards. This effort would require an overhaul of approximately 20% of the code.

# 6. Attachments

Attached to this document are the matrices used to analyze the systems evaluated for NC FAST functionality.

The attached *Level Two Business Function Evaluation Matrix* designates the systems that were identified for Level Two review. A score is assigned to each criterion to indicate how well the system meets the business function criterion, using the numbers 0-10, with the number "0" being the lowest score, and "10" being the highest score. Weighting factors of 1 through 5 are assigned to each criterion. The resulting Total Scores, in bold type, are calculated by multiplying the weight by the individual criterion score. The individual criterion scores represent an average score, computed from the scores given by each evaluation team member. Some scores may not be whole numbers due to the computations.

Total Scores are then further weighted to give the Intake, Assessment and Case Management numbers a multiplier of 70% and the remaining functions 30%. Adding the two weighted totals give a final Weighted Total for each system.

Technical reviews were documented separately by the technical review team for each system using the same scoring system. The attached *Level Two Technical Evaluation Matrix* shows the results of the technical review scoring. Scoring is the same as for the business matrix above, without the final functional weighting.

Attachment One – Level Two Business Function Evaluation Matrix Attachment Two – Level Two Technical Evaluation Matrix

# <u>Attachment One – Level Two Business Function Evaluation Matrix</u>

Function and Requirement Description	Level One Criterion	Importance of Function 5-Critical 4-Very Important 3-Important 2-Added Value 1-Not Important	Mecklenburg /SS/	ME ACES	MN SSS/	WI eWiSACWIS
PROGRAM AREAS COVERED			**			
Work First Cash and Employment Services Food Stamps Child Support			X X	X X		
Child Welfare Adult and Family Services Subsidized Child Care			X X	X X	Х	
Medicaid Children's Health Insurance Program			X X	X		
1.1.1 GENERAL CONDITIONS						
Provides a web-based system that can access through standard browser	*	3	1.9	10.0	0.0	8.8
Software is Public Domain, not requiring purchase by the state	*	3	2.4	10.0	4.0	8.7
Allows for customization to meet individual county needs Application available in English or Spanish	*	5 2	3.6 0.3	5.0 0.0	5.6 1.3	8.8 3.3
Database capacity expands for statewide implementation	*	5	1.9	10.0	7.6	9.2
User Access Security is role-based and multi-level System is in production in a county or state environment	*	5 5	6.9 6.1	10.0 10.0	8.0 7.3	9.3 9.3
TOTAL SCORE FOR GENERAL CONDITIONS		5	105.6	235.0	156.7	242.5

Function and Requirement Description	Level One Criterion	Importance of Function 5-Critical 4-Very Important 3-Important 2-Added Value 1-Not Important	Mecklenburg /SS/	ME ACES	MN SSS/	WI eWiSACWIS
1.1.2 INTAKE						
Provides an online data system that can share information across programs  Creates a "client" in the system	*	5 4	5.7 8.1	10.0 10.0	5.3 9.4	6.3 8.7
Checks to see if a client already exists in the system via multiple search criteria	*	5	7.7	10.0	8.7	9.2
Creates a case folder for new clients Creates households and client relationships		4 4	6.7 7.1	10.0 10.0	9.3 8.4	8.5 9.0
Provides online, program-specific data-gathering forms containing data elements not shared across programs		5	5.6	6.2	6.0	7.8
Creates a case file after checking for existing cases in legacy systems	*	5	2.7	0.0	4.1	5.5 6.2
Shares data among program supplements  TOTAL SCORE FOR INTAKE		5	6.4 <b>228.7</b>	10.0	3.4 <b>246.4</b>	6.∠ <b>279.7</b>
1.1.3 ASSESSMENT			228.7	301.0	246.4	2/9./
Allows for automated evaluation (i.e., self-directed or worker-facilitated) of program eligibility and applications	*	3	2.8	5.0	1.9	3.0
Provides prescreening capabilities for eligibility for multiple programs For Adult Services: Provides assessment tool for functional needs	*	5 5	3.7 0.9	4.8 0.0	0.9 1.0	2.3 0.0
For Protective Services: Provides approved assessment tool		5	1.4	0.0	8.0	8.2
For Work First: Provides employability and literacy assessment using accepted tools		5	1.3	0.0	0.7	0.0
For Work First: Provides substance abuse and domestic violence screening tools		5	0.7	0.0	1.1	0.0
Easily adds and updates programs Easily adds and updates benefits and services of programs	*	3 3	1.9 1.9	10.0 10.0	2.6 2.6	3.8 6.2
TOTAL SCORE FOR ASSESSMENT			59.5	99.0	79.6	91.5

1.1.4 ELIGIBILITY DETERMINATION   Contains eligibility engine with multiple program rules   3   2.1   10.0   0.0   0.8
On-line Program policy manuals and field level and screen level help tied to rules         3         2.3         4.2         2.1         2.5           Allows for storage and use of detailed program eligibility rules         *         3         2.0         10.0         0.7         2.5           Conducts benefit calculations         3         0.4         10.0         0.1         5.0           Computes deductible calculations         3         0.4         10.0         0.0         0.0           Produces files for EBT/EFT/MA card production         *         3         0.4         10.0         0.0         0.8           TOTAL SCORE FOR ELIGIBILITY DETERMINATION         23.1         162.6         9.0         35.0           1.1.5 CASE MANAGEMENT           Records all case-related activities and status         5         5.4         10.0         9.1         8.5           Provides service plan templates, calendar events, ticklers         *         3         4.6         5.0         9.0         8.7           Provides for reviews of closed cases         4         4.1         10.0         7.4         7.0
Allows for storage and use of detailed program eligibility rules   *   3   2.0   10.0   0.7   2.5
Conducts benefit calculations       3       0.4       10.0       0.1       5.0         Computes deductible calculations       3       0.4       10.0       0.0       0.0         Produces files for EBT/EFT/MA card production       *       3       0.4       10.0       0.0       0.8             TOTAL SCORE FOR ELIGIBILITY DETERMINATION       23.1       162.6       9.0       35.0         1.1.5 CASE MANAGEMENT       5       5.4       10.0       9.1       8.5         Provides service plan templates, calendar events, ticklers       *       3       4.6       5.0       9.0       8.7         Provides for reviews of closed cases       4       4.1       10.0       7.4       7.0
Computes deductible calculations       3       0.4       10.0       0.0       0.0         Produces files for EBT/EFT/MA card production       *       3       0.4       10.0       0.0       0.8             TOTAL SCORE FOR ELIGIBILITY DETERMINATION       23.1       162.6       9.0       35.0         1.1.5 CASE MANAGEMENT       5       5.4       10.0       9.1       8.5         Provides service plan templates, calendar events, ticklers       *       3       4.6       5.0       9.0       8.7         Provides for reviews of closed cases       4       4.1       10.0       7.4       7.0
Produces files for EBT/EFT/MA card production         *         3         0.4         10.0         0.0         0.8           TOTAL SCORE FOR ELIGIBILITY DETERMINATION         23.1         162.6         9.0         35.0           1.1.5 CASE MANAGEMENT         5         5.4         10.0         9.1         8.5           Provides service plan templates, calendar events, ticklers         *         3         4.6         5.0         9.0         8.7           Provides for reviews of closed cases         4         4.1         10.0         7.4         7.0
TOTAL SCORE FOR ELIGIBILITY DETERMINATION         23.1         162.6         9.0         35.0           1.1.5 CASE MANAGEMENT         5         5.4         10.0         9.1         8.5           Provides service plan templates, calendar events, ticklers         *         3         4.6         5.0         9.0         8.7           Provides for reviews of closed cases         4         4.1         10.0         7.4         7.0
1.1.5 CASE MANAGEMENT         Records all case-related activities and status       5       5.4       10.0       9.1       8.5         Provides service plan templates, calendar events, ticklers       *       3       4.6       5.0       9.0       8.7         Provides for reviews of closed cases       4       4.1       10.0       7.4       7.0
Records all case-related activities and status55.410.09.18.5Provides service plan templates, calendar events, ticklers*34.65.09.08.7Provides for reviews of closed cases44.110.07.47.0
Provides service plan templates, calendar events, ticklers  * 3 4.6 5.0 9.0 8.7 Provides for reviews of closed cases  4 10.0 7.4 7.0
Provides for reviews of closed cases 4 4.1 10.0 7.4 7.0
Provides referrals on-line  2 3.9 10.0 4.0 5.7
Allows for narratives         *         5         6.9         10.0         9.7         8.8
Retrieves and updates data from benefits and service delivery systems 5 0.6 2.0 2.7 5.3
Provides for access of benefits/service status 5 1.0 10.0 3.9 6.3
from existing systems
Feeds existing systems with eligibility information resulting in benefits
delivery and Federal reporting * 3 0.3 8.0 2.7 6.5
UTILITIES
Allows supervisors the ability to schedule caseloads for caseworkers  2 7.0 5.0 9.3 9.3
Allows supervisors the ability to manage caseloads
Integrates timesheets with case management capability  4 4.3 0.0 8.6 2.0
Allows entry and update of provider information for which NC FAST is the system of record 4 3.3 5.2 6.3 7.5
Associates providers to programs, benefits, and services  * 3 0.6 5.0 6.2 9.5

Function and Requirement Description	Level One Criterion	Importance of Function 5-Critical 4-Very Important 3-Important 2-Added Value 1-Not Important	Mecklenburg /SS/	ME ACES	ISSS NW	WI eWiSACWIS
Provides a personalized rolodex		2	0.4	0.0	0.7	1.5
Allows automated verification of client data (e.g., Dept. of Motor Vehicles, Social Security Administration)	*	3	0.3	1.0	1.6	0.7
Captures individuals' contacts with workers, including inbound and outbound notifications	*	5	4.3	10.0	6.1	7.7
Provides workers with correspondence templates		4	5.4	10.0	6.7	8.7
Includes intake logs	*	3	4.3	0.0	7.9	6.5
Provides query and report generation capabilities, including ad hoc and standard reports	*	5	4.6	3.0	8.6	6.5
Ties agency websites together in a portal format		2	0.7	0.0	0.0	1.3
Makes social services brochures, FAQs, etc. available for viewing and						
updating on-line		2	0.6	0.0	1.1	3.0
TOTAL SCORE FOR CASE MANAGEMENT			258.3	427.8	458.1	480.2
1.1.6 PROVIDES CBT TRAINING						
or Other online training guide	*	3	3.6	10.0	6.6	9.5
1.1.7 CHANNELS						
Provides Internet capabilities		2	0.7	0.0	1.4	6.2
Send and receive email		2	3.3	0.0	0.0	7.3
Enables an Interactive Voice Response (IVR) channel Accesses NCFAST functionalities from public locations via specialized		2	0.6	0.0	0.0	0.0
terminals		2	0.6	0.0	0.0	2.3
Sends and receives facsimiles		2	3.9	0.0	0.0	0.0
DATA WAREHOUSE						
Allows integration of case and client data with an existing data warehouse	*	5	0.7	5.0	4.1	3.5
TOTAL SCORE FOR CBT, CHANNELS			32.3	55.0	43.3	49.2
TOTAL SCORE FOR SYSTEM			707.5	1280.4	993.1	1206.5

Function and Requirement Description	Level One Criterion	Importance of Function 5-Critical 4-Very Important 3-Important 2-Added Value 1-Not Important	Mecklenburg /SS/	ME ACES	ISSS NW	WI eWiSACWIS
TOTAL SCORE FOR INTAKE ASSESSMENT AND CASE MANAGEMENT = 70%			382.5	579.5	548.8	595.9
TOTAL SCORE FOR REMAINING FUNCTIONS = 30%			48.3	135.8	62.7	106.5
WEIGHTED TOTAL			430.8	715.2	611.5	702.5

<sup>\*</sup> An asterisk in this column indicates that the criterion was included in the Level One evaluations.

# **Level 2 Business Review Matrix - Scoring Instructions**

Score each function on a scale of 1-10, with the number "1" meaning the functionality was there, the number "5" meaning the functionality was moderately usable, and the number "10" meaning the functionality was outstanding. Score "0" if the functionality does not exist by demonstration or interview with the demonstrator. Score the critical nature of the function on the 1-5 scale provided.

Be prepared to ask the demonstrator to show the capability of the system being reviewed, if it is not included in the formal presentation. If the functionality cannot be demonstrated, but the demonstrator says that the capacity is there, the score would be "1".

<sup>\*\*</sup> The system is used by only Program Integrity in production. The application and data gathering functions are used for all eligibility programs. Separate systems are used for child welfare and adult services.

# <u>Attachment Two – Level Two Technical Evaluation Matrix</u>

Function and Requirement Description	Level One Criterion	Importance of Function 5-Critical 4-Very Important 3-Important 2-Added Value 1-Not Important	Mecklenburg ISSI	ME ACES	MN SSSI	WI eWiSACWIS
ARCHITECTURE & TECHNOLOGY						
Provides a web-based system that can be accessed through a standard browser	*	5	0	10	0	6
Allows for customization to meet individual county needs	*	4	8	6	8	5
Component-based architecture (which allows for easily integrating legacy, current, and emerging technologies)	*	3	7	8	6	7
Architecture is flexible and not constrained	*	3	3	7	2	8
Capability of architecture to scale to statewide requirements		4	2	8	6	8
Minor gaps between current architecture and STA		3	6	7	4	5
Application technologies in line with departmental standards	*	2	2	5	0	8
Application's required software/utilities/etc. currently supported by department		2	6	3	0	7
Multi-tiered approach featuring thin client		3	2	7	2	7
Web services utilization		2	0	0	5	4
Efficient application performance		3	3	8	7	4
Ease of deployment		4	1	8	1	8
Level of effort to move to a statewide implementation is low		3	4	4	1	7
DATABASE						
Database capacity expands for statewide implementation	*	3	7	8	8	9
SECURITY						
User Access Security is role-based and multi-level	*	3	8	8	8	10
Departmental Security model can be implemented within application		2	6	5	5	8
SSL implemented		3	10	10	0	10

Function and Requirement Description	Level One Criterion	Importance of Function 5-Critical 4-Very Important 3-Important 2-Added Value 1-Not Important	Mecklenburg /SS/	ME ACES	MN SSSI	WI eWiSACWIS
INTEGRATION						
Ease of integration with existing systems, with regards to security integration, system integration, etc.		5	6	6	5	6
TOTAL SCORE FOR SYSTEM			252	395	219	399

# **Technical Functionality Review Matrix – Scoring Instructions**

Score each function on a scale of 1-10, with the number "1" meaning the functionality was there, the number "5" meaning the functionality was moderately usable, and the number "10" meaning the functionality was outstanding.

Score "0" if the functionality does not exist by demonstration or interview with the demonstrator.

Score the critical nature of the function on the 1-5 scale provided.